THE MARINE RECORD

DEVOTED TO NAVIGATION, COMMERCE, ENGINEERING AND SCIENCE.

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Det. Bel Isle & Windsor Ferry Co 65

AROUND THE LAKES.

CLEVELAND, OHIO.

Captain Jerry Green of Willoughby is in the city on business.

Captain Millen of the firm of Parker & Millen, of Detroit is in the city today.

Captain Cuson, manager of the Whitney line, arrived in Cleveland, last night.

The Globe Iron Works Co., is putting a new furnace in Mr. Harkness steam yacht.

Vesselmen are getting their tonnage together and arranging for the close of navigation.

There are now about 320,000 tons of ore on the docks of the N. Y. P. & O. but it is going off very rapidly.

Messrs. Fred Saal, C. F. Palmer and others of like ilk have gone on a hunting expedition into the wilds of Indiana.

Captain Estes, of Sandusky, owner of the steambarges Yosemite and Ohio, is in the city to look after repairs to the former.

The tug Samson takes the schooners Atmosphere, Captain Geough and Mary L. Higgie to Port Huron, where they will lay up.

The Cleveland Drydock Co. is putting a new jig mill into their new mill in the yard to expidite getting out timber for the vessel under contract.

The schooner May Richards, Captain Frank Brown, has gone into winter quarters at Lorain. The captain is in the city today to close up accounts.

Patrick Cummings, captain of schooner Camden, reports his yawlboat, twenty-two feet long and valued at $80, stolen from his vessel in the river bed last Saturday night.

The steamer Atlantic, which has been running between Cleveland and St. Ignace, left this port for the last time this season yesterday morning. She, too, has had a fairly prosperous year.

Mr. G. C. Barnes has put his Ætna shaking grate on all the new steamboats that have been built at this port during the past year, besides those placed aboard new steamers from other ports.

The tenth annual ball of the Seamen's assembly will be given at Gesangverein hall, 174 Ontario street, on Monday evening, November 16. We hope the merry flatfoots will have an enjoyable time tripping the light fantastic with their own particular stars.

The steambarge Messenger, Captain J. Baker, left here with his consorts the Senator Blood and the Genesee Chief. This makes the Messenger twenty-four trips to Cleveland this season and she has been unusually fortunate under the skillful guidance of her master, Captain Baker.

At the Globe iron shipyard one of the Hill boats will be ready to launch in about thirty days and the other in six weeks. The Lehigh line boats are progressing finely the first or No. 2 of the line is nearly in frame and the keel is laid and frames bent for the other.

Chaplain Jones, of the Bethel has returned home after his week's vacation attending the missionary convention at Detroit. We believe that the faithful discharge of duty, and the energetic, charitable character of this gentleman would be better appreciated if more widely known.

We are pained to announce the death of Mrs. Dracket, wife of John Dracket Jr. Mrs. Dracket breathed her life away Tuesday night surrounded by her little family. Mrs. Dracket was a daughter of Captain Richard Doty, an old lake master. The remains will be taken to Toledo for burial

The tug L. P. Smith, with the schooner John O'Neill in tow, collided with the lower Central Way bridge Monday morning. About sixty feet of the hand rail on the bridge was wrecked and the bridge was otherwise damaged, the loss aggregating $100. The schooner was damaged to the extent of $150.

Messrs. Ward & Jackson, shipsmiths, have closed contracts for the iron work on the three steam boats to be built at Quayle's Son's yard, one by the Cleveland Drydock Co. one at Radcliffe's yard. This firm has probably as complete a set of tools for boat work, as can be found at any port along the lakes and the work turned out is made to give satisfaction.

At the Cleveland drydock the steamer Columbia was in dock, for a new piece of keel, 100 feet of garboard strake, recaulked and searched up. The schooner H. P. Baldwin recaulked butts, and bottom searched up. Tug Wisconsin to tighten wheel, and some calking. The steamer Yosemite will go into dock to have a leak stopped around the stern pipe.

The body of Robert Cahill, who was reported as missing from his home on Leonard street two weeks ago, was found floating in the river near the Lake Erie Sand and Gravel Co's docks Saturday morning by Captain Charles Stickney of the tug Allie May. The remains were taken to Heffron's morgue on Detroit street and the coroner notified. Cahill leaves a wife.

The Chase machine company have about completed their new building on Elm street and they will soon be ready to enter into the manufacture of the Chase fog whistle machine and do a general jobbing work in their business. The officers of this new enterprise are G. C. Barnes president and general manager, James L. Chase vice president, and J. H. Ball, secretary and treasurer.

John Baker, the master of the steambarge Messenger, which carried deputy United States Marshall Eberman to Detroit a few weeks since while he was in charge of the boat, called at the United States district attorney's office and expressed a desire to plead guilty. Judge Walker has left the city, and Captain Baker will be given an opportunity to express his views of his guilt or innocence on Wednesday next.

The River Machine Co. are adding new tools to their already extensive plant, including among others, a large lathe, from a Cincinnati firm, and a new steam hammer, which will strike 1,000 pounds. This company is now prepared to do all kind of marine work with promptness. The new crank shaft recently put in the Dudley has given good satisfaction and as each member of the firm is a practical man in his department, good work may be relied upon.

Lighthouse inspector Gridley gives notice that the removal for the winter of the buoys in that portion of the tenth lighthouse district embraced by Lake Erie and the Detroit river, will begin about the 19th inst., and probably be completed by December 5th. Small scantling buoys will be left to mark the more important stations, as usual, in place of the buoys removed. The buoys in in Niagara river and the harbor of Buffalo will be left in position as long as possible, and on their removal no small buoys will be left in these localities.

The Brown hoisting and conveying machine company have just completed three of their cantilever rigs for discharging and handling iron ore on the old river bed and will commence another set of three more this week. This firm is now erecting four similar rigs in Duluth, Minn., also at Pittsburg, Pa. They will also erect one of their patent cantilever conveying machines on the crib waterworks to be used for conveying the sand, etc., dug out from the new tunnel now in course of building. Foreman Johnson with a gang of skilled workmen will have charge of this work.

The Globe Iron Works Co. are building a triple expansion engine for Captain Thomas Wilson's new boat, under contract at Quayle's Son's yard, 20, 31 and 52 by 42 inch stroke, and two Scotch boilers 11 feet diameter and 12 feet long. Also a compound engine 30 and 56 by 48 inch stroke and two boilers 10 feet diameter by 16 feet long for the steamer to be built by the Cleveland Drydock Co. for H. Johnson and others. In addition to this work the company has five boilers and machinery for the boats previously mentioned in these columns, all of which will keep them busy away into the spring.

Mr J. A. Westaway of Detroit, chief engineer of the Michigan Central Ferry boats was in the city yesterday. Mr. Westaway expresses himself as entirely satisfied with the new ferry steamer built by the Cleveland Ship Building Co., and says that as soon as she is completed she will steam for Detroit, ice or no ice. It is believed by Mr. Westaway that she will be ready to take her departure about the 1st of January, and he considers that no amount of ice will be able to stop her. It has been said that the MARINE RECORD has been somewhat previous in naming this new ferry the Transfer, that the company has already a ferry named the Transfer, but we are credibly informed that our prognostics are correct, inasmuch as the old Transfer was sold last Friday to a syndicate of Canadian gentlemen, Messrs. John Lane, Walker and others for $4,500. She will be dismantled, her machinery taken out and the hull converted into a floating drydock to be stationed at Windsor, Ont.

Meteorological summary for the week ending November 22, 1888:

Mean actual barometer	30.27
Mean temperature	39.4
Mean humidity	69.5
Total precipitation	73
Prevailing direction of wind	South
Total wind movement	1669
Av. cloudiness	7 9
Av state of weather	Cloudy
Max. temperature, highest	61.8
Max temperature, lowest	28.0

W. H. HAMMON, Sgt. Signal Corps e. U. S. A.

ASHTABULA HARBOR, OHIO.

Special to the Marine Record.

Business at our port is fast drawing to a close. Coal and ore hoists are being dismantled and dock and office forces are being reduced. There is however a goodly fleet of vessels in port unloading ore; coal shipments have nearly ceased. The schooner Rhodes loads coal for Chicago and contemplates an ore trip from Escanaba to Ohio ports yet this fall. The J. T. Fay loads coal in Erie and catches the Rhodes at this point.

The propeller Farwell loads coal for Chicago and will go into winter quarters there.

The L. S. & M. S. R. R. have commenced work on their new docks, under the management of Contractor Frank McKenzie. The improvement is quite extensive and will add very materially to their ability to do efficient and rapid work.

Captain Devney, the shipbuilder, has the keel laid and partially in frame a new tug for Erie parties, the third one built by him for fishing purposes this season.

Extensive improvements are rumored by all firms handling ore at this point. The Variety hoists are not a success yet, but have succeeded in doing some work but they are by no means satisfactory. They are still experimenting with them and intend to make them a success before leaving them for the winter. F. L. T.

HURON, OHIO.

The steambarge Leland, which arrived at this port Sunday afternoon, burned to the water's edge at about 5 o'clock Tuesday morning. The fire was caused by the explosion of a kerosene lamp. The boat was laden with about three hundred tons of coal, owned by the Beaver Run Coal Co., and 300 barrels of apples. The latter was the property of her captain, A. B. Slyfield, who is also the loser of two gold watches, a diamond scarfpin, a considerable sum of money and all his clothing. His personal loss will amount to about $1,000. The Leland was valued at about $18,000 and was owned at St. Clair by Messrs. Slyfield & Jinks. The amount of insurance about $15,000. The George W. Robinson lumber company sustained damages to the amount of $700, fully insured. The Leland, 236 tons, was built at New Baltimore by McLeod in 1873 and was classed B1.

CHARLOTTE.

The tug Martin is still on Graham's Shoal and is said to be in bad shape. The Leviathan left to release her.

CHICAGO, ILL.

Special to the Marine Record.

The Delaware and Hudson Coal Company and the Silver Creek and Morris Coal Company will, if the threats of irate vesselowners go for aught, have a number of demurrage suits to defend. These companies have been having coal sent them from the foot of Lake Erie without regard to their facilities for handling the stuff. In consequence vessels with cargoes consigned to their docks here have been unable to unload. At Silver creek, with room for one boat to unload, there are the schooners Moonlight and Danforth, and then the steamship Neosho pulled in. At the Delaware & Hudson the Parnell, City of Rome, Nevada, and J. M. Hutchinson are hemmed in with no prospect of getting freed of their cargoes.

There are over fifty schooners stripped and tied up here already. Most of these are lumber carriers. The water is very low and within a foot of the 1847 stage.

The splendid steamship Neosho, arrived here Thursday morning from Buffalo, with coal consigned to the Morris and Silver Creek Company, at Elston road, North Branch. She was built at Quayle's Son's yard, Cleveland, for Robert Rhodes, and launched in July last. She is driven by a fore and aft compound engine 30 and 54X 48 stroke, built by Trout, King Iron works, Buffalo, and two boilers 10 ft 6 In X 16 ft 6 in., each allowed 125 lbs steam, built by the Lake Erie Boiler Works, Buffalo. She is supplied with the American Ship Windlass Company's Steam Windlasses, fore and aft and Williamson Brothers' steam steerer. Her cabin and departments are fitted out elaborately and elegantly, vieing with any other wooden steamship on the lakes. Capt. W. H. Humphrey is in command, Chas. Cook 1st mate, Frank Newton 2nd mate, Christ. Castle chief engineer, Wm Lawrence second engineer. She is the most complete and elegantly furnished wooden steamship that ever arrived at Chicago.

The T. D. Stimson ran into Manitowoc last Friday under stress of weather and it was found that she had lost a bucket off her wheel. As she was laden too deep to be placed in the dry dock, divers wers sent from Dunham's wrecking and towing company, Chicago, who succeeded in removing the opposite blade of the wheel and she left Manitowoc on Tuesday.

Freight and passenger steamer India of the Anchor line which has been running between Buffalo and Lake Superior all the summer arrived here with a general cargo Monday morning.

The schooner Chas. J. Wyman, Capt. Alex. Smith, goes to Grand Haven to lay up.

The steamship R. P. Ranney Capt. J. A. Holmes arrived here Monday morning with coal from Buffalo, having on board her 20th cargo this season. She has made excellent time this season having made one trip in 16 days one trip in 18 days and one trip in 19 days between Ashtabula, where she loaded coals for Duluth, thence to Ashland for iron ore for Ashtabula. She towed one schooner all the season and two, part of the time.

The schooner Moonlight goes to Milwaukee to lay up and will get new decks and a general overhauling during the winter.

The propeller St. Paul, Captain W. D. Wair, arrived Monday morning and closed her two year's contract between the Central Vermont line and her owners Wickham Bros., Huron, Ohio. She has made a most successful season with her consort the Thos. L. Parker, without accident of any kind.

The steamship Susquehanna, Captain M. Riley, arrived at 7:30 p. m. Monday November 19th, with merchandise. This is her first appearance at this port since she left here, October 9th for Milwaukee, to go into drydock at Wolf & Davidson's for a new rudder, the new rudder was placed on her under the direction and superintendance of R. Learmont, chief engineer of the Anchor Line, and is a masterpiece of engineering skill. It is placed to stay.

The propeller Nebraska, Captain Tom Burton, will go to Buffalo to lay up during the winter. She will have her wooden arches taken out and replaced with steel arches under her promenade deck, which will extend fore and aft. Her promenade deck will be lowered two feet and she will receive three new masts.

At the Chicago Drydock Co's yard the tug W. L. Ewing was in for new frames and outside plank, the schooner R. B. Hayes for a piece of new keel and calking and general repairs, the schooner J. B. Merrill received a new topmast, the schooner Andrew Jackson a new centerboard, the schooner Anna Maria and propeller Worthington some repairs.

At Miller Bros.'s shipyard the propeller Portage was in dock for calking bottom, the steamer Pewaukee had her mast taken out at the derrick, the schooner Empire State was in dock for bottom calking.

Henry Bloecker, of Grand Haven, marine engine builder, was here Monday, returning home from Manitowoc where he had placed an engine 24 by 26, and boiler 8½ by 15 on board a steambarge built by Scove, for Samuel Hall. The new steamer is 137½ feet keel, 28 feet beam, 12½ feet hold, and was to be launched Tuesday, the 20th. inst. The firm of H. Bloecker & Co. intend at once to form themselves into a stock company with $50,00 capital, when they will enter extensively into building marine engines of all classes and sizes. The firm are at present building a condensing engine 18 by 20 for Captain R. C. Brittain of Saugatuck, for a new steamer he will build this winter.

The Chicago board of marine underwriters fixed the trip rates on grain for the last half of November as follows: To ports on Lake Michigan, 75 cents; on Lake Superior $1,50; on Lake Huron, Sarnia and Detroit river, $1,05; on Georgian Bay and Lake Erie $1,25; on Lake Ontario and Ogdensburg, $1,55; to Montreal, $3.

The buoys on the reef off South Chicago, will be replaced November 24, by spar buoys, that will be allowed to remain until carried away by ice.

It is the impression amongst many vessel men that Captain W. H. Rounds would make an excellent inspector of steamboat hulls, in case Captain Cyrus Sinclair who now holds the appointment, should be called upon to resign when the change of government takes place next spring.

It is reported that the steambarge Hubbell burned last week, was insured against fire for $29,500. Her valuation in Lloyd's insurance register was $30,000.

The decision of the Illinois supreme court Thursday setting aside the legal arbitration in the case of the Vessel Owners' Towing Co. vs. J. V. Taylor will tend to upset the future settlements of collision cases by arbitration instead of by an appeal to the courts One of J. V. Taylor's schooners in tow of a vessel owners' tug had a collision with a small schooner outside the Chicago harbor. The case was left to arbitration, as usual in such disputes, but when the arbiters decided against Taylor, he appealed to the courts. The superior court upheld the arbitration, but Judge Tuley in the appolate court set it aside and found for Taylor. On appeal to the supreme court Judge Tuley was sustained. The question now arises: If legal arbitration in such cases is not binding what is the use of resorting to it?

The owners of the Gazelle settled Monday for the loss of the yacht Josie in 1885. It was in the sinking of the Josie by the Gazelle that Mrs. Wilson of Springfield was drowned.

The manifest of the Starucca's cargo was received in Chicago. It consists of twenty eight safes, a large quantity of canned goods, tarred felting, whiskey, and supplies for the mining regions, including groceries, sugar, and wheelbarrows. The aggregate value of the cargo was about $50,000.

WILLIAMS.

MARITIME LAW.

COLLISION—STEAMER AND SCHOONER—IDENTITY OF COLLIDING VESSL.

U. S. circuit Court, Southern District of New York.

The libellant's schooner John K. Shaw was sunk with all on board in the neighborhood of Long Branch on the night of Feby. 23rd 1888. On the same night the steamship Newport, bound from New York to Havana, was in collision with an unknown schooner. In this suit libellants sought to prove that the unknown schooner was the Shaw, and that she was sunk through the fault of the Newport. The District Court held that the libellants had not made out their case against the Newport, and thereupon dismissed the libel. On appeal to this court, *held* that the decree of the District Court should be affirmed.

[District Court Opinion, Sept. 29th, 1886.[

E. H, LACOMBE, Circuit Judge.

On February 21, 1884, the libellant's schooner John K. Shaw sailed from Newport News, Virginia, bound for New Haven. Since then, except as a wreck, she has not been heard from. At daylight on February 24th masts were seen standing out of water at a point about four and a half miles off shore, between Deal Beach and Long Branch. Wreckage identified as coming from the Shaw was, on February 24th and subsequent days, found floating in the water or stranded at different places on the beach. On February 23d, 1884, the steamer Newport, bound from New York to Havana, was in collision with an unknown schooner. The log states the time of the collision as 6 40 P. M., and adds that apparently no damage was done.

These facts are undisputed. Libellants undertake further to show that the unknown schooner was the "Shaw"; that the collision occurred wholly through the steamer's fault; that it took place within half a mile of the place where the masts of the wreck, above referred to, were subsequently found; that the collision resulted in the starboard bow of the "Newport" breaking open the "Shaw" and causing her to sink; that she did so sink within a few minutes after collision, at the place where the wreck was found; and that such a wreck was in fact the "Shaw".

This case presents solely questions of fact and to the careful and elaborate discussion of the testimony, which is found in the opinion of the learned District Judge, little need be added by this Court. As to certain points more or less relied upon by him—such as the comparative heaviness of the 'Shaw's" load, and the presence or absence of a deck load on the schooner with which the "Newport" was in collision—the proofs in this Court tend strongly to modify his opinion. But upon the whole case, as it now stands, there seems to be no sufficient reason to dissent from his conclusion. As one branch of the libellant's case, however, is fortified in this Court by an argument, apparently not advanced before the District Judge, a brief consideration of such argument will not be inappropriate.

It is shown by direct evidence that the wreck, which libellants claim to be that of their vessel, lay probably about four and a half miles, certainly not more than five miles, off shore. Tney also contend that the schooner with which the steamer was in collision, sank within a few minutes, and before she had sailed half a mile. In fact the only theory upon which they undertake to maintain their contention, that the colliding schooner was seriously injured, is found in the statement of the two or three witnesses who speak of her as listing over and going down within a few lengths. Unless, then, it can be shown that the steamship, at the time of the collision, was within half a mile of the place where the wreck was afterwards found, the claim that the steamer was in collision with the "Shaw" cannot be sustained. The weight of the direct testimony in the case is clearly to the effect, as the District Judge has found, that the "Newport" was from seven to eight miles off shore at the moment of collision; and that she passed Scotland Light at such a distance, and thereafter followed such a course, at such a speed, as as to bring her to that point at 6:40 P. M.

The force of this evidence libellants seek to break by an acute and elaborate mathematical argument. Taking the compass bearing of Sandy Hook and of the Scotland Lightship, as recorded in the logs, and laying down on the chart the angles formed thereby, counsel undertakes to show that the lines which subtend those angles could not have been traversed by the steamship within the time allowed by the logs upon any course, other than the one, which, contrary to the weight of the direct evidence, he assumes to be the one she followed, and certainly not on the course which the weight of the direct evidence shows her to have taken. This argument would no doubt have all the conclusiveness of a mathimatical demonstration if its premises were as certain as those from which the mathematician reasons. Such, however, is not the case. The libellants rely upon these entries in the logs.

5:35 p. m., Sandy Hook a beam engineers log).

5:40 Hook West (Steamer's log).

5:50 Passed Scotland Light Ship (Steamer's log).

Both the logs state the time of collision as 6.40 p. m. This is explainable either upon the supposition that the respective recording officers correctly noted the time, and that the time pieces to which they referred agreed; or upon the supposition that some mutual agreement as to the time of this unusual, and possibly important occurance, was arrived at before the entries were originally put down on the slate or finally entered in the logs. On the same afternoon however, the steamer had anchored for several minutes, and subsequently got under way. These occurences are thus recorded in the logs:

4.25. Thick weather, snow, came to anchor lower quarantine (steamer's log).

4.30. Anchored (engineer's log).

5.20. Clearing up, got under way (steamer's log).

5.15. Started again (engineer's log).

The discrepancy in these entries may be explained either upon the supposition that the time pieces referred to by the recording officers did not agree, or upon the supposition that these officers did not note the time with absolute accuracy. Under either presumption we must be prepared to find similar variances in other similar entries made by the same officers at about the same time. When a margin of error so great as this (five to ten minutes) is to be allowed for, the entries at to the bearings of the hook and the lightship be trusted to support an argument so closely reasoned as that of libelant's counsel.

The force of the direct testimony not being thus broken, and its weight supporting claimant's contention that the collision occurred as least more than six miles off shore, it follows that the unknown schooner, which the Newport encountered was not the Shaw.

The decision of the District Court is affirmed with cost.

NATIONAL BOARD OF TRADE.

The national board of trade which met in Chicago last Friday, adopted the following pertinent resolutions among others:

The following resolution was proposed by Mr. Janney. of the Philadelphia board of trade:

Whereas, The commercial steam marine of the United States to foreign ports can only be made to succeed by the same means that have made that of other nations successful; therefore be it

Resolved, That subsidies similar to those allowed by other nations should be granted to American steamships for carrying the United States mails.

Resolved, That these subsidies and every other proper means should be adopted by congressional legislation for the purpose of aiding our merchants to compete on equal terms for the South American trade.

Whereas, With the extention of steam and electric communication, the field for American products and manufactures is the world;

Resolved, That our government should follow the example of leading commercial nations in encouraging the establishment of regular and frequent communication by means of American steamship lines, and to this end should recognize the same principal on the ocean which has proven so successful in increasing the efficiency of our postal service on land; viz., paying a fair price for a fair service, irrespective of the amount of postage collected on any paticular route; and be it further

Resolved, That every legitimate means to foster our merchant marine should be used, [including the enactment of the law now pending in congress, popularly known as the tonnage bill] applying alike to sail and steam vessels engaged in foreign commerce.

The resolution was carried, that part urging the enactment of the tonnage bill, having been previously struck out.

A proposition by the Chicago board of trade that congress be memorialized to so amend the interstate commerce law as to establish a standard bill of lading, was referred to the committee on uniformity of laws.

The following, offered by the New York board of trade and transportation, was adopted, after considerable discussion:

Resolved, That the national board of trade favors the proposition to organize a naval reserve for the United States, to consist of officers and men from the mercantile marine, yachtsmen, ex-naval and ex-marine revenue officers and watermen generally, and of vessels to be built with reference to their use in the time of war as auxiliary to the regular navy.

SUBVENTION OF MERCHANT STEAMERS IN AN AUXILIARY NAVY.

With reference to the subvention of merchant steamers, possibly the following particulars would not be uninteresting to some of your reeders as showing the assistance given to shipowners and indirectly to shipbuilders, as it represents not less than eighty millions of dollars paid to shipbuilders for one class of vessels only, by the British government; indeed it may be taken for granted that such expensive steamers as the City of New York, City of Paris, the new White Star steamer Majestic and her sister ship, each worth about $1,800,000, would hardly have been built were it not for the enormous subsidy paid by the government.

The retaining fee for each of the new steamers amounts to over $30,000 per anuum, and the total cost of retaining reaches nearly $2,000,000 per annum. The fleet is a formidable one "in its way," for there are six vessels over 8,000 tons with engine power sufficient to drive them over 24 miles an hour. Twenty can steam 20 miles an hour, and the remaining 70 are good "16 mile boats." Should these vessels be required as troop ships or armed cruisers the price stipulated for each of the new steamers amounts to about $600,000 per annum.

Could not such a fleet be quickly produced in this, the richest, the finest and best governed country under the sun, with its illimitable resources both as to men and materials, if its people would but do their duty towards an industry that has ever gone hand in hand with the rising greatness of the greatest empires?—*Joseph R. Oldham, in Marine Journal, (N. Y.)*

SUPERVISING INSPECTOR'S REPORT.

General Dumont, supervising inspector of steam vessels, in his annual report for the last fiscal year says, that of the 1,878 applications for pilot licenses, forty-two were rejected for color blindness. During the year 6,325 vessels were inspected, an increase of 305 over the previous year. Thirty-six accidents were reported during the year, twelve collisions, five fires, five explosions, seven bursting of steam pipes, and seven wrecks.

Two hundred and two lives were lost on steam vessels last year against 220 the preceding year. The average annual loss of life on steamboats for the last thirty years, divided into decades, shows, General Dumont says, a gratifying progress in the efficiency of the officers of the inspection service in carrying into effect the laws to prevent loss of life on steam vessels The data in this respect, furnished by his report, is as follows: From 1859 to 1868, 721 lives lost annually; from 1869 to 1878, 365 lives lost annually, and from 1879 to 1888 only 213 annually.

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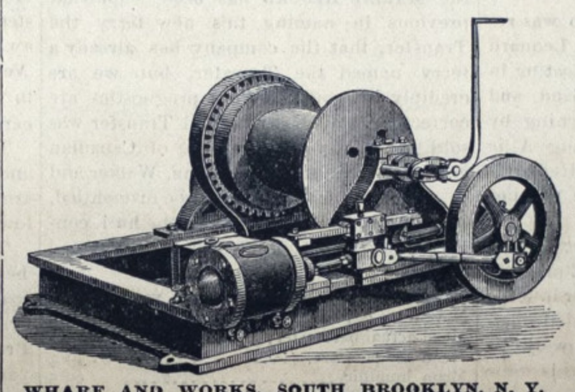

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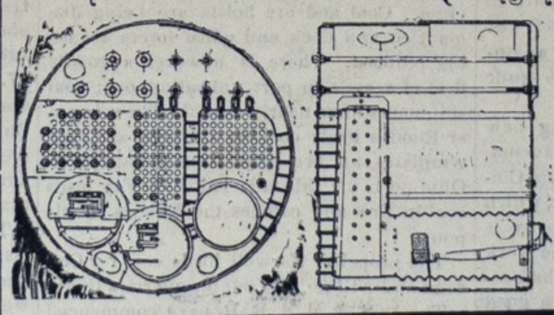

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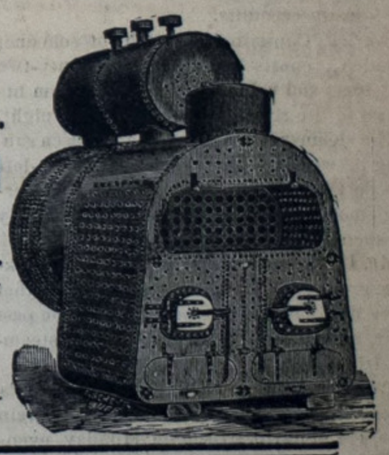

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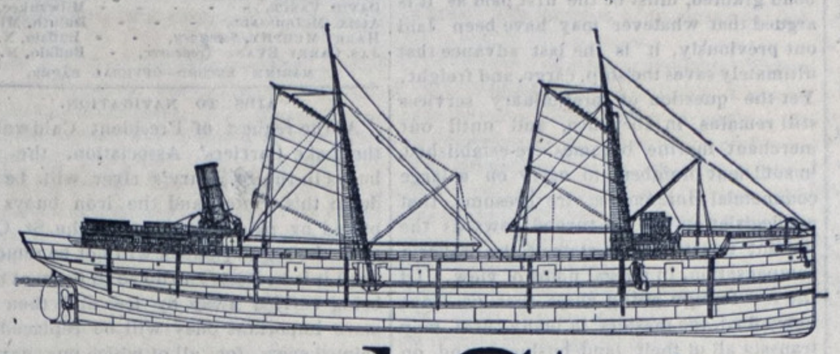

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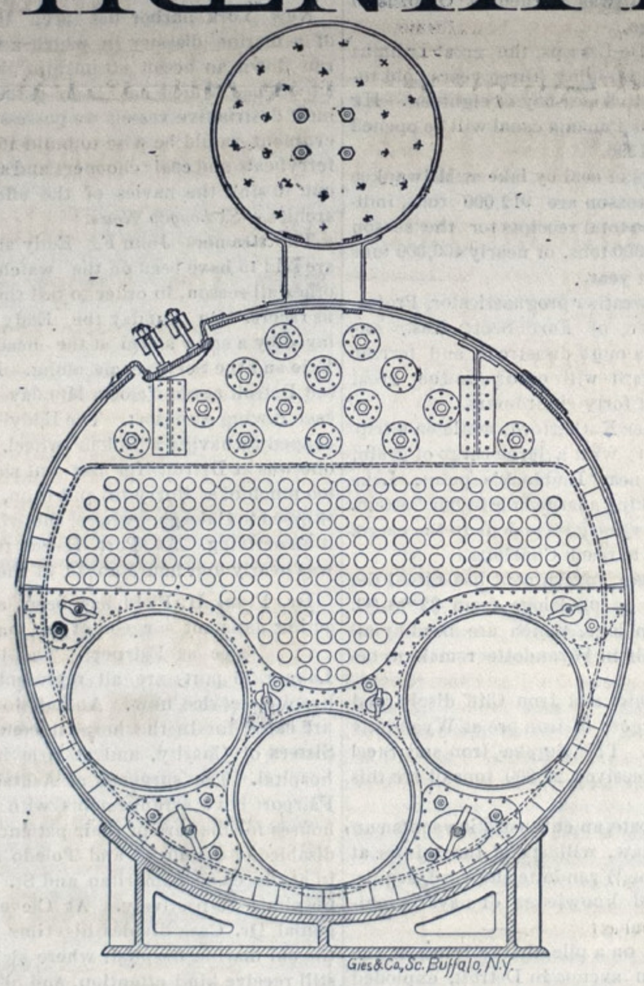

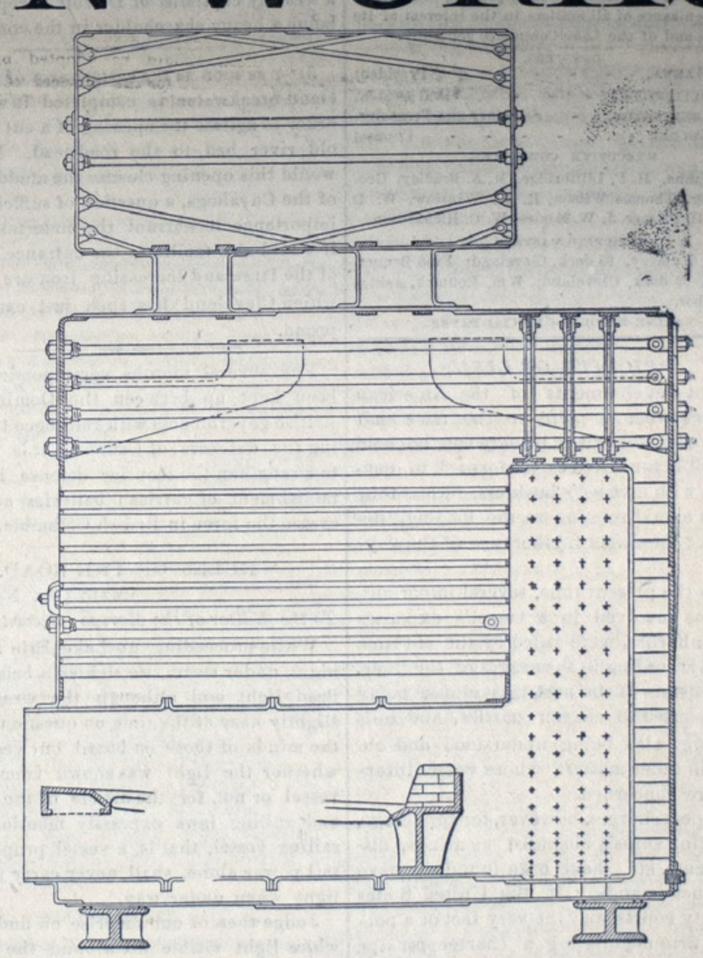

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Marine Record.

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MARINE RECORD—OFFICIAL PAPER.

PRIORITY OF LIEN.

Recent developments of the American libel laws seem to point to the facts that neither a vessel or her owners can be held responsible for services performed in connection with a vessel's business, unless they have an actual relation to the loading, delivery, or the direct furtherance of the voyage.

Up to the present time, several important questions involved in a vessel's expenses while in harbor, were ruled by the old time maxim, according to the usages of the trade, or the custom of the port, this clause being often inserted in charter parties, and bills of lading; also being understood and observed in other matters where vessel interests were concerned.

The port charges, however, for brokerage, transacting ships's business, clearings, disbursements, etc., have been found to have no distinct standing in the United States admiralty courts, and the very fact of a person or firm negotiating a charter for the employment of a vessel does not render the vessel or owners liable to recompense the negotiator. Unless documentary evidence of a different nature can be produced the person negotiating a charter can not libel a vessel for services rendered.

Notwithstanding the above a charter itself, when properly attested, is both legal and binding in the light of a maritime contract, and on these grounds alone have the admiralty courts jurisdiction over the charterers, captains and owners. It is more than likely that a person acting as agent and being instrumental in the placing of a charter would expect that he had every legal right on his side in levying and collecting a commission for services rendered to the ship and owners; yet such is not the legal aspect of the case, for in a recent decision in admiralty the court ruled that the business of negotiating a charter, was a preliminary and not in any sense a maritime service or contract; hence, the court had no jurisdiction to award the broker compensation for his services. As has been said, if the broker of a charter party be admitted, the insurance broker must follow the drayman, the expressman and all others who perform services having reference to a voyage either in contemplation or executed, and in the case of a dry dock, stevedores or shipkeeper's services no maritime lien is created and the local fact has been placed on record that a shipwright has no lien after the vessel has passed out of his hands. Yet, on the other hand, no undue weight must be placed on the assertion that the vessel and owners are not liable; for supplies and all expenses necessary to fulfill an agreement once entered into; and while the vessel is prosecuting her voyage she is distinctly liable for all incidental expenses and other charges incurred with the view of bringing or taking the vessel to a port of destination, for even her bottom may be pledged, and a bottomry bond executed, with the gratifying knowledge that the last bond granted, must be the first paid as it is argued that whatever may have been laid out previously, it is the last advance that ultimately saves the ship, cargo, and freight. Yet the question of preliminary services still remains in abeyance, and until our merchant marine becomes re-established, in sufficient numbers to carry on a large commercial intercourse, we presume that no legislation will be turned towards the present unsatisfactory state of the broker's compensation, in a legal point of view. Of the few foreign going ships that we have now afloat, the masters in many cases may transact all of their land business, and on the lakes the owners have their property always at hand.

THE proposed bridge across the Detroit river has practically had a set back, from which in the interests of navigation it is to be hoped that it will never recover, for no matter how constructed, the fact remains that a bridge across the river at Detroit would prove an artificial obstruction to steam vessels, as well as sail, and many would be the casualties resulting from vessels coming in contact with pillars and posts during erection, and after the completion of the proposed bridge. We are gratified to learn that the efforts of this paper in decrying even the proposed winter bridge has met with success, all interests practically agreeing that a tunnel would better meet the requirements of trade. With this end in view, a wealthy syndicate with a capital stock of $1,500,000 has been incorporated under the name and title of the Detroit Tunnel Co., and preliminary steps will be taken at an early date, although it is not expected that the direct work of excavating will commence until next spring. Luther Beecher a wealthy capitalist of Detroit is reported as being a heavy shareholder in the company.

JUST as soon as the eastern arm of the Cleveland breakwater is completed it will be in order to agitate the opening of a cut from the old river bed to the roadstead. Not only would this opening cleanse the muddy waters of the Cuyahoga, a question of sufficient local importance to warrant the undertaking, but it would also facilitate the entrance and exit of the large and increasing iron ore trade, of which Cleveland has such just cause to be proud.

FOR several months correspondence has been kept up between the Dominion and British governments with reference to increasing the defenses of Canada. It is proposed to strengthen the frontier defense by the establishment of garrison batteries and to increase the force in British Columbia.

RULES OF THE ROAD.

MIDLAKE, Nov. 20.

To the Editor of the Marine Record.

While proceeding up Lake Erie the other night, under steam, we sighted a bright mast head light and although the weather was slightly hazy at the time no question arose in the minds of those on board our vessel as to whether the light was shown from a steam vessel or not, for the article of the steering and sailing laws expressly mention that a sailing vessel, that is, a vessel propelled by sail power alone, shall never carry the white light when under way.

Judge then of our surprise on finding this white light visible all around the horizon, carried at the mizen lower mast head of a large schooner with all sail set and apparently proceeding on the way to the Detroit river. No farther notice was taken and we soon left the lubberly and misleading light far astern; yet, on looking back and seeing the side light and masthead light clearly burning we could not but express a wish that a revenue cutter would happen along and sight this illegal light, to the complete discomfiture of the vessel showing it. If the master of the schooner was fulfilling the orders of his superiors he certainly ought to protest and make the matter known, for a private light so exhibited on the highway of commerce might lead to disastrous results, not only sacrificing property but valuable lives also. But, on the other hand, if the white masthead light was exhibited at the discretion of those on board, no censure could be too severe to apply in a case like this. Seeing the important nature of this communication, I sincerely trust that you will grant the space for publication in the MARINE RECORD, and as you have so earnestly attended all matters relating to the navigation of the chain of lakes in the past, I wish you every success in the future. DAVID A. PATON.

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TO CONSIDER AND TAKE ACTION UPON ALL GENERAL QUESTIONS RELATING TO THE NAVIGATION AND CARRYING BUSINESS OF THE GREAT LAKES AND THE WATERS TRIBUTARY THERETO, WITH THE INTENT TO IMPROVE THE CHARACTER OF THE SERVICE RENDERED TO THE PUBLIC, TO PROTECT THE COMMON INTEREST OF LAKE CARRIERS, AND PROMOTE THEIR GENERAL WELFARE.

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MARINE RECORD—OFFICIAL PAPER.

AIDS TO NAVIGATION.

At the request of President Caldwell of the Lake Carriers' Association, the spar buoys in the St. Mary's river will be left down this winter, and the iron buoys replaced by painted spars. In the St. Clair river the regular buoys will not be removed until it is necessary to do so to prevent their being carried away by ice and then the more important ones will be replaced by painted spars, for all of which our navigators will pe thankfull.

BOARD MEETING.

A meeting of the Board of Managers of the Lake Carriers' Association was held in the Committee rooms of the Merchants' Exchange, Buffalo, to-day, at 2.30 P M., for the consideration of various subjects of importance to the association.

FORE AND AFT.

The New York canals will be closed at midnight November 30.

It is said the repairs on the schooner Reuben Doud will raise her from A2½ class to A2.

The Chicago seamen's union paid the funeral expenses of Captain John Kennedy, late master of the schooner J. M. Hutchinson.

Steamship Cambria will go on dock at Owen Sound to be cut in two and have 35 feet added to her, which will make her one of the finest palace steamers in inland waters.

Harrow and others, the New Baltimore builders, will construct a new steamer this winter, using the machinery from the tug Quayle which was burned at Ontonagon some years ago.

Ferdinand De Lesseps, the great Isthmus canal builder, is eighty three years old today, and as active as a boy of eighteen. He thinks that his Panama canal will be opened for traffic in 1390.

The receipts of coal by lake at Milwaukee thus far this season are 912,000 tons, indicating that the total receipts for the season will be 1,000,000 tons, or nearly 400,000 tons more than last year.

The noted weather prognasticator, Professor Stockmeyer, of Fort Scott Kas., announces that a most disastrous and terrific gale and blizzard will occur on the great lakes inside of forty eight hours.

The schooner Rutherford, while on a trip to Sodus point with a large cargo of grain, struck a rock near Ruddock's point, Lake Ontario, breaking a large hole in her bottom. Considerable damage was done to the cargo. She managed to reach Charlotte.

The Canadian government has raised the export duty on pine logs from $2 to $3. Canadian elm logs, which are used by all the stave mills in Wyandotte remain as before.

The Iron Chief and Iron Cliff discharged their last cargoes of iron ore at Wyandotte last Saturday. The Eureka Iron and Steel works have received 22,000 tons of ore this season.

Wayne Choate, an enthusiastic yachtsman of East Saginaw, will spend the winter at the office of the Wyandotte shipyard, acquiring a practical knowledge of naval architecture.

The boiler on a pile driver lying at the foot of Helen avenue in Detroit, exploded the other morning, and Charles Boston, Jr., was so badly injured that he died a few hours later.

The buoys on the reef off South Chicago will be replaced November 24 by small spar buoys properly marked that will be allowed to remain in place until nipped or swept away by the ice.

Graham & Morton, of the Benton harbor line, positively deny the rumor that they were going to buy off the Cleveland boat, City of Detroit, which is to be run in opposition to their line next season.

The remains of Edward Ostrander, Picton, sailor on schooner C. Gearing, drowned at Oswego some time ago, was found on Monday in Baldwins bay. The body was very much decomposed. It has been forwarded to Picton for burial.

The output of flour from Minneapolis mills the week ending November 10 was 149,800 barrels, against 150,600 the week before. Many mills will shut down as soon as lake navigation closes, as the market is still dull and lifeless.

The smallest steam engine ever made has just been completed, after two years of labor, for the Paris exhibition. It is composed of 180 pieces of metal, is a shade under three-fifths of an inch in height, and weighs less than one-ninth of an ounce. A watchmaker made it.

At the morning session of the National Board of Trade at Chicago last week resolutions were adopted calling on congress to take measures looking to a strengthening of our harbors and coast defenses, to reduce the revenue and to restrict immigration.

Material is being hauled on the ground for Captain B. G. Yocum's new barge. Napoleon Grignon has the contract for building her and he promises to produce a boat which will be a credit to her owner. This will be the first boat built of wood in Duluth.

The great height of water in Lake Superior, at the present time, and the great rainfall in the country tributaries to the great lakes, indicate a high water season on the St. Lawrence next summer. The year 1889 will be as remarkable for high water as 1888 has been for low water.

A. Kirby, shipbuilder of Wyandotte, and Tom Swan, keeper of a restaurant in Detroit, made a bet on the election that Mr. Kirby should pay $100 if Cleveland won and, on the other hand, if Harrison was elected Mr. Kirby should eat, drink and smoke at Swan's expense for a year to come. Kirby is now eating at Swan's expense.

Steamer Sorrento (Ger.) which arrived at New York November 21 from Hamburg, reports; October 26 lat 46.11 lon 44 had a northeast and west gale with tremendous high seas; kept the steamer two points off her course 39 hours; used oil with wonderfully good effect, so much so that the passengers came on deck during the storm without danger.

Colonel C. G. McAwley, commandant of the marine corps, has submitted his annual report to the Secretary of the Navy. He states that on October 1, 1888, there were 1,890 enlisted men in the corps, 925 being on board ships in commission, and 965 doing duty at the several shore stations. The commandant recommends five hundred addstional privates.

Secretary Swan, of the lumberman's exchange, Chicago, reports the stocks on hand November 1, 1888, as follows: 664,598,999 feet of lumber and timber, 364,100,000 shingles, 58,448,450 pieces lath, 1,795,020 pickets, and 354,787 cedar posts, against 577,330,746 feet lumber and timber, 399,774,-750 shingles, 49,770,960 lath, 899,017 pickets, and 161,649 cedar posts November 1, 1887.

New York harbor has been the scene of a marine disaster in which a ferryboat ran down an ocean steamship. From the experience which has been gained of the most destructive vessels we possess the government would be wise to build its navy of ferryboats and coal schooners and send them out to sink the navies of the effect monarchies.—*Sheboygan News.*

The steamers John F. Eddy and Servia are said to have been on the watch for each other all season, in order to test their merits as racers. On Sunday the Eddy was delayed by a snow storm at the head of Lake Erie and the Servia came along. Both passed Detroit at ten o'clock Monday morning each towing a consort. The Eddy is handicapped by having a broken wheel. A new one was at Detroit for her but she was in too much of a hurry to put it on, so it was shipped to Chicago, where she will receive it on arriving. At Port Huron the Eddy was nearly four hours ahead of the Servia.

Dr. Frank H. Field has been appointed acting assistant surgeon of the marine hospital service at Fairport. The important Lake Erie ports are all represented in the hospital service now. At Buffalo patients are cared for in the hospital conducted by Sisters of Charity, and at Erie in Hamot hospital. The surgeons at Ashtabula and Fairport have arrangements with boarding houses for the care of their patients, and the disabled of Sandusky and Toledo are taken in at the Good Samaritan and St. Vincent's hospitals respectively. At Cleveland the genial Dr. Case divides his time between the old marine hospital, where sick sailors still receive kind attention, and his office in the government building.

REAR ADMIRAL BALDWIN died at noon Saturday. The admiral was born in New York city in 1822. He was appointed a midshipman on April 24, 1838, and experienced his first sea service on the frigate Brandywine. During the Mexican War he was attached to the frigate Congress and distinguished himself in two important engagements. When the war broke out he was appointed a lieutenant. On November 18, 1862, he was commissioned as commander. In 1869 he was commissioned as captain, and from that time to 1876 he figured conspicuously in naval circles. The title of commander was conferred on him on August 8, 1876, and in the fall of 1879 he received the commission of rear admiral. He was in command of the European station until 1885, when he was retired.

At the boiler shop of the Cleveland Shipbuilding Co. they are busy on eight Scotch type boilers. The furnaces for the first four are about completed and the others will be under way in about thirty days.

Around the Lakes Continued from 1st Page.]

DETROIT, MICH.

Special to the Marine Record.

The Detroit Drydock Co. have had the tug Torrent in for calking, and steel plate sheathing on the outside. Steambarge J.S. Ruby for a new wheel and to stop a leak. Propeller Volunteer for repairs to stern bearing and minor repairs preparatory to laying up for the winter. The schooner H. W. Sage is at the company's yard at Springwells undergoing entensive repairs. The schooner Iron State will have her masts taken out at the large sheer legs, and new spars will be stepped, when she will be taken to the yard at Springwells for a thorough rebuild during the winter months. The Manitowoc will be docked to stop a leak, after which the side wheel steamers City of Detroit will go in for extensive alterations.

Thos. Thurston, the boat builder, has contracted to build a sail yacht for parties here and has considerable repair work on hand.

Samuel F. Hodge & Co. have placed a new wheel on the Osceola, also a new wheel on the Bessemer. They have signed a contract to build Fitzgerald & Co., of Milwaukee, a fore and aft compound engine, dimensions 24 and 44 by 42. They will also furnish the boilers.

J. C. Goss, sailmaker, is busy with a number of men fitting the canvas sheathing on the new City of Detroit.

The propeller Leland, burned to the water's edge, at Huron, Ohio, will prove a total loss. Insurance $15,000.

The Eagle Iron Works have signed a contract to build a 14 by 16 engine, boilers, and outfit complete for Tucker Bros., Mount Clemens, Mich. They are busy figuring on new work, and report the business outlook as favorable. They are also building a fire box for a marine type boiler, to the order of Eugene Robinson, railroad excavator, and they have just received an additional order from the Michigan Sulphite Fibre company at Port Huron, for one of their 5 by 6 duplex hoisitng engines and a considerable order for shafting, pulleys and etc.

The Detroit and Cleveland Steam Navigation company will run their boats just as long as it is possible to navigate.

Mr. McGregor, of the Central Boiler Works is at Port Huron, superintending the fitting of machinery supplied by him to the Michigan Sulphite Fibre Works.

The City of Detroit of the Detroit and Cleveland Steam Navigation company fleet is laid up here and will go into the Detroit drydock at an early date. She will undergo a general and thorough overhauling, and refitting. All modern appliances for comfort and safety of passengers will be introduced, including a large and elaborate dining saloon, re-arrangement of staterooms, etc. No expense will be spared in refitting this splendid boat for the Lake Michigan passenger trade, to ply between St. Joseph and Chicago.

The race between the Alice Enright of Toledo, and the City of the Straits, of Detroit, took place last Monday. Intense excitement prevailed in certain circles here, and the new of the City of the Straits' success was seemingly a great relief. Certainly the race seems to have been a spirited one. The Alice Enright was behind 45' 46" which, is to long odds ever to be overcome and the rivalry is at an end. SWAIN.

BUFFALO, N. Y.

The May Durr was docked for repairs. Both she and the Halsted will winter here. The Windsor lays up. The Cuba will probably go to Detroit for wheat.

Coal shippers want to send a number more cargoes to Chicago and Milwaukee at the old rates, but they are held back to some extent on account of the blockade at those ports. There is considerable tonnage here, much of it ore laden, which will be delayed in unloading.

At the request of the president of the Lake Carriers' Association the lighthouse board has consented to leave all spar buoys in St. Mary's river till the last boat has passed, and substitute for cans taken up spars of the same color.

A serious marine accident occurred in the river last week. The new propeller May Durr, towing the schooner Hatch, ran upon a mud bank in mid river just below Strawberry Island. The schooner crashed into the steamer running her jibboon through the steamer's cabin and ripped her open as far as her engine, bending some of her machinery. The schooner's stem cut down the steamer's stern well to the water's edge and the schooner's bowsprit and jibboom were taken out. The loss to the two will amount to from $4,000 to $5,000. This shoal is entirely unknown to Niagara river tugmen and must have formed quite recently.

The tow of the Isaac May, which includes the barges Waubaushene and Muskoka, are to lay up in Tonawanda. But for a loose shoe and stern bearing on the steamer they would make another trip.

Captain S. B. Grummond, vessel and tug owner, of Detroit was in Buffalo Monday.

No information of value was received by the Union Steamboat company regarding the Starucca and it looks as though efforts to release her this fall were not yet promising success.

Captain McLeod wires from Escanaba that he is waiting for James Reid of Ignace to go and look at the Northwest on Fisherman's Shoal. A sort of contract has been agreed on for her release dependent on Reid's inspection of the vessel. Latest reaorts from the

stranded steamer Starucca represents her as having pounded over two sandbars to a third or inside bar, where she lies imbedded in the sand and full of water. The wooden arches of the steamer are broken and she is full of water. The crew is camped on the shore watching to save whatever cargo they can. St. Ignace reports that the tugs Sea Gull, Avery and Mocking Bird, with full wrecking outfits, have gone from that point to render assistance. Latest estimates place the value of the Starucca's cargo at fully $100,000. Washington Bullard, general manager of the Union steamboat company, says that the chances for her release are meager.

PORT HURON, MICH.

Special to the Marine Record.

Love & Schofield's boiler works are as busy as they can possibly be. They are now building a marine boiler 12x16 feet for the new boat building at Simon Langell's yard at St. Clair; also a smoke stack 60 in. in diameter and 36 feet long for the same boat, three stationary boilers, dimensions 9x16, 6x16, 5x10. They have also built a small iron steam launch for their own use, bottom plates of 3-16 inch iron, and the upper plate of 1-8 inch; length over all, 28 feet; beam, 5 feet 9 inches. She will be fitted with a small five square engine, and a Scotch type boiler. They have recently received from Hilles & Jones, of Wilmington, Del., a large punching machine to accommodate plates 1 1-8 inches thick.

At the Wolverine dry dock they have a Hodge wheel to ship on the J. C. Clark, of Sarnia, and have completed the extensive rebuild of the propellor Osceola, which has had new keel and keelsons, an entire new bottom, refastened thoroughly and a part new deck. The Dry Dock Iron Works are now busy overhauling her machinery, but as it will take about three weeks yet to complete this work she will not be able to do any more business this season, and will lay up here.

The barge Dan Rogers is at present in the Wolverine dry dock for survey. She will probably have very extensive repairs done to her after the survey has been held. The schooner Hattie Wells, of Port Huron, will be the next vessel to dock. She is to be calked and receive a new stem preparatory to laying up for the season.

Palmer & Benham's tug Samson is here waiting business, having towed up from Cleveland the schooners Atmosphere and Higgie.

Dunford & Alverson's dry dock has the schooner Mineral State in for caulking and general overhauling. When finished she will winter at St. Clair. The tow barge Sonora has been remasted and received a new bowsprit. She will lay up here. This firm have about completed the building and furnishing of a new set of offices, 28x22 feet, two story frame. The interior is elegantly finished, and panneled to represent a vessel's cabin. The first floor will be used for a general office and the second floor for drafting room, store room and private office, and will be fitted throughout with the Detroit Heating and Lighting Company's hot water apparatus.

The Phoenix Iron Works are erecting a fore and aft compound engine for Holland & Pringle, of Marine City, dimensions 27 and 50x40; also the boiler, which is 12x16. They are building a steeple compound engine, dimensions 22 and 44x40; also a boiler 10x16, for the Marine Transit Co., and have just completed a steeple compound engine 22 and 44x40, with a boiler 9½x16, for the Toledo & Saginaw Transportation Co. They are now working on a new fire box boiler for the steamer Dormer, dimensions 5x9 feet; a Scotch type boiler for the steam yacht Hinda, dimensions 7½x9 feet; steam barge Westford, a new marine boiler 8x14 feet, and are figuring on new work. Orders being plentiful this large firm will extend and improve their erecting shop at an early date.

Carleton & Cole's machinery supply depot has recently furnished the Michigan Sulphite Fibre Co. an eighty horse power engine, and placed four Worthington steam pumps, a Clayton air compresser and a general outfit at the works of the above firm. They have also furnished the Alpena Fibre Works with one of the largest class of Worthington's steam pumps and considerable other machinery. They have also placed a Corliss 300 horse power engine in Botsford's elevator, and recently filled the orders for several Chandler & Taylor's engines, of Indianapolis, Ind. The Alpena Sulphite Fibre Co. says in a recent communication to this firm: In regard to the Worthington Independent Condenser, recently placed by you in our mills, will say that it fully comes up to your guarantee, increasing the power of our engine fully 25 per cent, and helping us in several other ways. We are at present using part of the warm water from it for our felt washer, and find that it makes them wear six weeks, whereas they wore only three weeks when using the cold water. We expect to use the balance of the water for the boiler feed when you get the new pumps here.

We may add that Messrs. Carleton & Cole have an extensive establishment here and represent as agents some of the finest machinery produced in the United States, including the Corliss engine, a full line of Worthington's pumps and Rumsey's marine pumps; also Van Duzen's steam jet pumps and Chandler & Taylor self contained stationary engine.

The schooner Atmosphere arrived here Wednesday morning from Cleveland in tow of the Samson. After discharging her cargo of coal she will go into dry dock for extensive repairs and a general overhauling. SWAIN.

Kendall, the marine reporter, has bought the schooner Emma, which was seized for smuggling opium.

The Osceola has at last been hauled out of the Wolverine Dry Dock, after a thorough rebuild. She will be a fine boat when finished, and will run on lake Michigan this winter.

The barge Sonora is at Dunford & Alverson's drydock receiving new spars.

The Dan Rogers is waterlogged again; she was picked up out on Lake Huron last week by the tug Sweepstakes. She will have to go to the drydock.

The schooner Mystic Star in tow of the tug Bennet, went to Sarnia for a load of barley and when ready to leave the Bennett pulled her out about a foot, on the bottom. The tugs Storm King and Bennett worked a while on her and hen had to lighter her off. She started down Sunday.

Hanson Burke, a Swedish sailor of Chicago, fell from a loft on the schooner Comanche yesterday morning off Point au Barques and was killed instantly. His remains were burried here.

Wednesday afternoon a man named Grey was terribly mangled at Campbell's dock, Port Huron. He was sweeping off the staging, after a gang of men had unloaded coal from a boat at dock, when he fell into the hold of the vessel. His face was terribly cut and bruised, and both legs were broken, he is also supposed to be injured internally.

The steambarge Alex Folsom, towing the barges Mitchell and Nelson, bound up, when abreast of Gross Point, struck an obstruction and broke two buckets off her wheel. The tug Crusader left Monday to take the tow to Chicago, where the Folsom will be docked for repairs.

SAULT STE MARIE, MICH.

One of the deck hands of the barge S. C. Baldwin, named Louis Helmquest, was drowned as the vessel was entering the canal. The engineer of the Baldwin was scalded to death on the way down. At midnight last Thursday, while the barge Colorado was lying windbound at the west end of the canal, the schooner Iron Cliff struck her, tearing away thirty-five feet of her bulwarks and breaking nine feet of her stanchions.

The Starucca went aground below Grand Marias, the tug Andrew J. Smith went to her assistance. The latest reports are that she is but little injured. The tug Smith with a lighter were able to commence work Monday, at which time the Smith had a line out to the Starucca. Three hundred tons of freight have been jettisoned. The Mentor which left to lighter her went aground at Point aux Pins. She had about 700 tons of mostly coarse freight aboard.

The steamer Bessemer, which was released from Top Sail Island, is again in trouble. This time she is stranded at Sailors' Encampment and is out over a foot. The tugs Music and Pelican went to her assistance. The propeller Colorado had temporary repairs made here, and started for Duluth.

The Sault ste Marie News has the following: Tuesday night at the Neebish the Canadian barge Chamberlain, light, got out of the Canadian channel and grounded hard. She reached the rapids just after dark and Captain Featherstonhaugh, her skipper, anxious to get through made the attempt and got in trouble. Being light and under full speed, she ran entirely out of the channel. In this condition and with nothing to lighter, she was difficult to release. However Perry's wrecking tug Smith, succeeded in extricating her, with as little delay as possible.

The steamer Southern Bell capsized in Munoskong river last week. A part of the cargo was 500 bushels of wheat owned by C. W. Pickford, of this city.

Judge E. S. B. Sutton, acting for the Reid towing and wrecking company, tied up the Canadian steamer Athabasca on Thursday to satisfy a claim of $12,000 for damages alleged to have occured by reason of the Athabasca running into a raft of logs last summer. Messrs. Perry and Kemp signed bonds and the steamship was on her way in twenty minutes—the quickest time on record for such a proceeding.

The lighter M. S. Trempe, while being loaded with ore from the grounded Bessemer on Tuesday night, was given more than she could hold up under. Her settling was discovered in time for the tug Smith to tow her ashore, where she sunk in shallow water. Her trouble entailed no heavy expense upon her owner, Mr. Frank Perry.

Fewer serious accidents, so marine men say, have happened during the season of 1888, than for many years past. Freights are not very tempting and boats are being laid up much earlier than usual this year.

MARQUETTE, MICH.

Taking into account the lateness of the season, shipments of ore by lake ending with and including November 14, footed up to a handsome figure. Totals from different points being 131,687 gross tons. Of this quantity there went from Marquette 31,778 gross tons; from Escanaba, 63,830 tons; from St. Ignace, 475 tons; from Ashland Wis., 51,449 tons; from Two Harbors, 14,163 tons. Total for the season to date, 71,741 tons, in excess of quantity that had been shipped by lake at this stage of season in 1887, and 1,016,113 tons above the shipments at the corresponding date in 1886. By range the shipments are as follows: Marquette range, 1,880,031 tons; Gogebic range, 1,202,392 tons; Menominee range, 1,067,508 tons; Vermillion range, 422,982 tons.

CLAYTON, N. Y.

The schooner Hartford, Captain Wm. O'Tool, passed down Sunday laden with wheat for Ogdensburg. After being unloaded she will be brought to Clayton and laid up for the winter. The Hartford has had a successful season in the iron ore and grain trade on the lakes, this being her only trip to the river. The vessel is owned in Clayton; C. E. Rees, W. H. Consaul, G. H. McKinley and Captain Wm. O'Toole being the owners.

SAND BEACH, MICH.

Special to the Marine Record.

The following craft were sheltered here the last week:

November 16, steamers N. Mills and two, Nebraska and two, Tempest No. 2 and two, Porter Chamberlain and three, Roy, City of Alpena, S. F. Hodge. Rhoda Stewart and three, Republic, Havana and one.

17, Araxes and one, Germania and four; the tug J. V. O'Brian came down from Oscoda and towed up the schooner Wm. Brake which lay wind bound in the harbor for several days.

18, steamers R. G. Stewart, Mackinaw, Lake ton, Raleigh and consort, tug Winslow and chooners Unadilla, Wawanosh and A. J. Rogers.

Henry A. Kearny, the chief engineer of the steamer T. W. Snook, was taken suddenly ill with bleeding at the lungs. The propeller run back from Saginaw Bay to secure medicial aid, and the sick man was sent to his home in Detroit by the steamer City of Alpena.

The wrecking steamer Fern brought the wrecked propeller E. M. Foster into port bottom side up, and capsized the wreck, and is now engaged in raising her so she can be pumped out, the boiler and engine were lost out of her during the gale which drove her ashore October 1. The hull appears to be in pretty fair condition, and is owned by Captain Thomas Carrie of Algonac.

T.

TOLEDO, OHIO.

Special to the Marine Record.

Bell, the ship carpenter, will put new spars in the barge Wm. Case and give the schr. W. H. Rounds new rail, bulwarks, stanchions, planksheer and timberheads this winter.

The schooners St. Peter and John Schutte and barge W. L. Peck have gone into winter quarters in Swan creek. Steamer Chief Justice Waite is laid up at the foot of Monroe street.

The Monahansett and Massasoit are unloading ore in Buffalo. They will come here to lay up.

The Andrews took the Red, White and Blue to Kelly's Island to load stone for Cleveland and then went to Sandusky and towed the Anna P. Grover here Wednesday

A new boiler shop has been started here by Connely Bros., of Cleveland. It is called the Maumee boiler works, and is located on the corner of Wade and Williams Sts. They are doing a large business, it being necessary to work late at night to complete their orders.

No building or rebuilding will be done at Craig's ship yard this winter, but every thing will be in readiness for next season. The large marine railway will be an improvement long needed in Toledo.

The dredges General Meade and Champion will be rebuilt this winter.

Hardy Bros. are going to sell their tugs, the Pathfinder and W. H. Doan, and buy an interest in a steam barge.

Capt. Malcolm Stalker's funeral was held Wednesday afternoon. He was put in a vault.

The W. & L. E. coal dock is completed but the derricks are not up. They will be erected this winter. This dock is at Ironville.

C. O. D.

ESCANABA, MICH.

Captain George McLeod, agent of the insurance company, arrived Saturday, to look over the stranded schooner Northwest. It is decided to adandon her for the winter and she has been stripped. The owners have forwarded the following to the insurance companies: "In connection with the apandonment made of this date of a certain interest in the schooner Northwest, so far as the time is covered by your policy, on that interest referred to in the abandonment, we desire to call your attention to the fact that there have been certain expenditures made in the interest of all concerned, looking to the safeguard or recovery of said vessel, which we trust will be duly and properly adjusted." The Northwest was recently purchased from R. P. Fizgerald and others of Milwaukee, by Capt. James Corrigan and John Huntington. She was 966 tons register, built at Bangor, by Boston, in 1873, valued at $35,000 and classed A 1½.

It is impossible to say anything about loading a boat now. The ore is frozen solid. A telegram from Marquette also reported the ore frozen. Ore shippers had hoped to get a great deal more ore from Escanaba and they are still in the market for tonnage with the rate of freight satisfactory to such vessel owners as can conveniently send their boats there, but this unwelcome news may put a stop to shipments from Lake Superior. Several boats are on their way up there, but it is generally believed that the weather will not permit some of them to return. One of the Cleveland transportation company's boats arrived at Portage and a report from her says that ice is making there. The propeller J. H. Outhwaite and consort were delayed in loading at Escanaba from Saturday morning until Tuesday evening on account of the severe weather.

ERIE, PA.

Captain Edward Knobloh has purchased the tug W. J. McCarter for $3,500.

MILWAUKEE, WIS.

Special to the Marine Record.

The Milwaukee Shipyard Company have commenced work on a new steambarge for the same syndicate that owns the Rugee. The new boat will be somewhat larger than the Rugee and will also have considerable more power, so as to be able to tow if necessity should require.

The tug Hagerman is being repaired at Milwaukee shipyard.

The boats are stripping as fast as they arrive there being about forty sail steam and laid up at this port now.

The Egan will take a load of grain down and will probably lay up at Buffalo.

Coal receipts to date approximate about 950,000 tons, and with twelve cargoes to come. It is expected they will make it 975,000 tons. The increase of receipts over last year is nearly 400,000 tons.

The shipyard of Messrs. Reiboldt, Walter & Co., at Sheboygan, is building a steambarge to carry about 450 m of lumber. It will be owned by Manistee mill men.

The Milwaukee Tug Co. are going to have a new hull and boiler built to take the place of the tug Holten, using her old engine.

The tugs Dexter and Starke Bros. will have a general overhauling.

Captain S. Neff will have a steambarge of about 450m lumber capacity and he will also rebuild the barge M. Groh.

The Milwaukee tug men will give a ball for the benefit of the families of captain and engineer Sullivan who were lost on the tug Lawrence. Captain A. Gibbs, formerly of the steamer Omaha, leaves the latter part of the month for the pacific coast where he will spend the winter.

The schooner A. M. Peterson takes a load of barley to Buffalo.

J.

SANDUSKY, OHIO.

The contract for a sidewheel steamer to take the place of the Ferris on the Sandusky and Islands route, was awarded Monday to Captain John Monk, shipbuilder at this port, by Andrew Wehrle, Jr. The new boat will be about 140 feet in length with other dimensions in proportion, and will cost about $30,000. She will be launched next May.

KINGSTON, ONT.

The schr W. I. Preston, grain laden from Detroit for Ogdensburg, went ashore on the head of Wolfe island in a blinding storm Monday night. The vessel is full of water. The crew was saved. The schr W. I. Preston is owned by Mr. Goble of Oswego. She was built in 1861 and rebuilt in 1882 and 1885 the latest repairs giving her a rating of A1½ and a valuation of $5,000. She registers 251 net tons, canal size.

The Montreal transportation company will build two barges this winter. The schooner Southampton will be rebuilt. The propeller Scotia has gone into winter quarters here.

MARINE CITY, MICH.

The steambarge Edward Smith and barge Fryer and Marvin, arrived, and have gone into winter quarters in Belle river.

The new steambarge which has been building at the Marine Transit company's yard during the past few months was successfully launched on the 14th. She is about the size of the Miami.

Capt. W. B. Morley now has about twenty-five frames up for the new steamer which he is building at his yard in this city. This steamer will be a little longer than the W. B. Morley, and be the largest boat of and description ever built on the St. Clair river. She will probably carry nearly 2800 tons.

PORT ARTHUR, ONT.

Gradually the navigation season is drawing near its close. The Empire expects to make one more round trip, and the C. P. R. steamers hope, weather permitting, to make two more. This fall is considered exceptionally favorable for mariners. Last year at this date people were crossing Kaministiquia on the ice, while now it is open, mild weather.

WEST BAY CITY.

The propeller Majestic, 315 feet long was launched from Captain James Davidson's yard last Saturday, fully finished. She was at once laid up for the winter. A towbarge will be ready to launch in January. He has just laid the keels of a steamer 205 feet long for Eastman & Wilhelm of East Saginaw and another 315 feet long that is not definately sold yet.

GODERICH, ONT.

Navigation is gradually closing at this port. The schooner Jane McLeod arrived and will go into winter quarters immediately. The steambarge Tillie Smith arrived with coal from Toledo. The tugs J. B. Jones and Arcadia brought down the fishing fleet from Georgian Bay safely and all will winter here. The following vessels have stripped and laid up at this port so far: Schooners Gold Hunter, H. N. Todman J. N. Carter, Jane McLeod, Evening Star, J. G. Kolfage; tugs J. B. Jones and Arcadia.

MUSKEGON, MICH.

Several vessels have gone into winter quarters here and the mills are preparing to shut down in a few days. Active preparations are being made for the season in the woods. Indications now are that the coming season's output of logs will fall somewhat short of last year.

MOUNT CLEMENS, MICH.

Special to the Marine Record.

The large three masted tow barge being built by Captain Dulac, for the Tonawanda barge line, is getting along in good shape and is estimated to carry 850,000 feet lumber. We learn that Captain Dulac is figuring closely on new work and we would not be surprised to see the keel of a large steambarge laid at this yard shortly.

Captain O. O. Rolph, has the schooner Brenton, stripped and laid up at this port for the winter. The captain left for his home on Wednesday night. SWAIN.

OBITUARY.

CAPTAIN MALCOLM STALKER.

On Monday morning at 3:30 Captain Malcolm Stalker, one of the best known and most highly respected captains on the chain of lakes, died at his home, corner of Woodville and Nevada streets, on the east side, Toledo. Captain Stalker received a stroke of paralysis while in port at Ashtabula last fall, and his death resulted directly from this cause. He was born in Campbelltown, Scotland, 58 years ago. In 1850 he came to America, and from that year until a few months since, has been connected in one position or another with the commerce of the lakes. He first went before the mast in the schooner Jennie Woods, and in 1852 settled in Milan O. In 1856 he took command of the schooner Dardanella and held it for two years, when he resigned to take command of the new schooner Tim Baker. In 1863 he went into the schooner Malcolm Stalker, named in his honor. This position he held until 1869, when he was transferred to the schooner Atmosphere. He afterwards had command of the schooners M. W. Page and the Chas. Foster. In the spring of last year he left the Foster to take command of the big schooner Golden Age, left vacant by the resignation of Captain Chas. Hubbard of Toledo. It was while at Ashtabula with the Golden Age that he received the fatal stroke which led to his death. Captain Stalker has left behind him a record as a sailor that few if any on the entire lakes have equalled. In all of his 38 years' sailing, he never had an accident. He never had a vessel ashore and never cost the insurance companies one cent. He leaves a wife and an adopted son to mourn his loss. His nephews Dan and Duncan Stalker, are captains of the schooners Porter and Marion W. Page respectively His death, although not unexpected, will be learned with sincere regret, not only by his friends here, but his numerous aquaintances at every port on the great lakes. Captain Stalker has taken his last trip. His passage across the dark river in charge of the dread pilot Charon, was as calm and peaceful as ever his bark on his own loved waters of the Maumee.

No more upon life's stormy sea his barque
rides to and from the shore.
In some safe harbor we know not the sails are
furled forevermore.

LAKE FREIGHES.

The only engagements made for carrying late loads yesterday were the steamer D. Ballentine, ore, Escanaba to Ohio ports, $1,-25; schooner William Shupe, coal, Cleveland to Detroit, 30c.

BUFFALO, N. Y., November 21.—Coal charters: Henry Chisholm, John Martin, C. S. Parnell, W. H. Gratwick, Jewett, Avon, Portage, Tioga, Chicago, $1,00; Charles Foster, Racine, $1.00.

Canal shipments are about done and rates not quotable.

CHICAGO, November 21—The rate on corn from this port to Buffalo was reduced to 1½c to-day. Even at this figure engagements were but 221,000 bushels, with one charter of flaxseed. Charters reported were: to Buffalo, Nebraska, John B. Lyon, Albany, Commodore, all corn: to Erie, Clarion, flaxseed.

Messrs. Bassett Presley & Train, iron merchants, have entered into contract with the Clevelend Drydock Co. to furnish the iron, spike and steel arches that will enter into the construction of the new steamboat they will build for Johnson and others: The arches will be 18 by ⅞ and forty feet long.

HON. C. B. MORTON, commissioner of navigation, notifies us that the bureau of navigation is informed that under a recent decree of the Congress of Ecuador, foreign vessels may engage in the river and coast trade of that country, except during a time of revolution or in event of a war with any country.

Colletor Arbuckle was appointed custodian of the new government building today.

Shipyard for Sale or Rent,

THE LOOMIS SHIPYARD AT ERIE PA., IS OFfered for sale or rent, including all materials, tools and good will. A first class opening for a shipcarpenter with moderate capital. Terms to suit purchaser. If not disposed of as a whole, will sell tools, materials, etc., in lots to suit. For inventory, terms, etc., apply at MARINE RECORD office, or to D. L. HUBBARD, Erie, Pa.

FOR SALE.

PASSENGER PROPELLER GOLDEN EAGLE, Thoroughly over hauled this spring, "Sutton" Engine 14×14, 100 pounds steam, runs 14 miles an hour easily, and carrys 300 people. Owner has no reute for her and will sell for what she is worth.
JAMES E. ENGLISH.
East Saginaw. Mich.

FOR SALE.

THE STEAM BARGE ST. JOSEPH, with Boiler, Engine, and outfit of forward part of Boat. This Boat had her Cabin and a portion of her stern burned off, but is in good shape to be rebuilt and made one of the strongest and best boats on the Lakes, or towing etc. and would be well suited for Saginaw Bay Lumber trade. The Boat can be seen at Port Huron, Mich. For terms address the F. W. HARVEY LUMBER CO., 238 South Water St., Chicago Ill.
Nov. 20. tf.

ST. CLAIR FLATS SHIP CANAL.

Definition—St. Clair Ship Canal comprises not only that portion of the work included between the dikes, but also the improved channels of approach above and below the dikes.

Rule 1st—The movements of all vessels, boats, and other floating things in the canal shall be under the direction of the custodian and his assistants, and their orders and instructions must be obeyed.

Rule 2nd—The canal is for transit only, therefor vessels and boats are forbidden to land at or tie up to the banks unless on government business, to enter the canal two or more abreast, to pass each other while going in the same direction in the canal, to pass the canal in more than one line going each way, to obstruct the canal in any way, or to intentionally delay, by slow passage through the canal, or by any other means, the progress of other vessels navigating the same.

To hug the canal bank in passing, but must keep as near the middle of the canal as is consistent with safe navigation.

To attempt passing the canal in face of running ice, except at their own risk, and liability to make good any damage to the canal or its banks which may result from such attempt.

To pass the canal at a rate of speed exceeding five miles per hour.

To throw anything into the canal.

Rule 3d—Sailing vessels must not beat through the canal, but must either tow through or wait for a fair wind.

Rule 4th—No vessel, however propelled, shall pass through the canal with her sail, or sails up, except sail vessels running with a fair wind

Rule 5th—The available depth of water in the canal will be announced from time to time, in the marine columns of the newspapers, and vessels drawing more than this are forbidden to attempt passing through.

Rule 6th—To prevent blockades in the canal or its approaches, the custodian of the canal is authorized to detain any vessel at either end of the channel, until in his opinion a safe passage can be secured.

Rule 7th—Rafts are forbidden to use, or to attempt to use the canal.

Rule 8th—Neglect to obey any lawful order or a violation of any of the foregoing rules and regulations will be construed as obstructing the navigation of the canal.

WILLIAM C. ENDICOTT, Secretary of War.

* * * * * * * * * *

Sec. 3. * * * Any person who shall willfully and unlawfully injure any pier, breakwater, or other work of the United States for the improvment of rivers or harbors, or navigation in the United States, shall, on conviction thereof, be punished by a fine not exceeding $1,000.

* * * * * * * * *

Sec. 7.—That it shall be the duty of the Secretary of War to prescribe such rules and regulations in respect to the use and administrations of the Des Moines Rapids Canal, the St. Mary's Falls Canal, the Louisville and Portland Canal, and the St. Clair Flats Ship Canal as in his judgment the public necessity may require, which rules and regulations shall be posted in some conspicuous place for the information of the public; any person knowingly and willfully violating such rules and regulations shall be liable to a fine not exceeding $500, or imprisonment not exceeding six months, to be enforced in any District court in the United States within whose territorial jurisdiction such offence may have been commited.

* * * * * * * * *

O. M. POE,
Col. of Engin'rs, Brev. Brig. Gen. U. S. Army

HISTORY OF THE ST. CLAIR WATERWAY.

In connection with the above rules and regulations the following short history by Col. Watson Fox will be of interest:

"About thirty-five years ago the American and Canadian public were greatly aroused over the damage done to shipping in passing the River St. Clair through Lake St. Clair to the Detroit river. In 1854 a public meeting was called in Buffalo, of which Millard Fillmore was chairman, to consider the matter. They appointed a committee to ascertain the amount of damage caused to American and Canadian shipping during the preceding summer, and it was found to be between $600,000 and $700,000. In the spring of 1855 the Buffalo board of trade appointed a committee with Colonel Fox as chairman, to raise a private subscription for the purpose of dredging the channel. This was before the government had made any appropriations for internal improvement. Twelve thousand dollars are subscribed, but only $4,000 collected. Nevertheless work was begun in dredging the sand that had accumulated at the mouth of the River St. Clair. The sum raised was found to be wholly inadequate and the matter was brought to the attention of congress and the Canadian parliament. Congress appropriated $50,000.

"Colonel Fox and John J. Henderson, at that time a member of the Buffalo Commercial Advertiser company, interested the Hon. George Brown, the Canadian minister. He presented the matter to parliment, which appropriated £400 on condition that the center of the canal should be exactly on the boundary line. This condition, Mr. Fox asserts, was not known to the United States authorities, he fearing to acquaint them with the facts for fear they would not consent to the location. A canal 1,000 feet long, 200 feet wide, and 14 feet deep was built and the Canadian government, finding it to accord with the prescribed intentions, paid over their share of the expenses. This canal remained in use for sixteen years, and is still employed by light draught vessels. It failed, however, to meet the needs of a great and growing commerce, and about seventeen years ago the United States government built at its own expense another canal west of the old one and lying wholly within the United States limits. This canal was 400 feet wide and 16 feet deep, and was built at a far greater expense and more securely than the old one. Colonel Fox who was in a position to know the facts about the building of the old canal, stoutly affirms that while that is neutral territory, the one completed in 1871 is exclusively under the control of the United States.

THE New York Herald which has heretofore been somewhat "afraid of the cars' deseves much commendation for the stand it has taken relative to the naval reserve bill, now before congress, and we trust it will continue in the work in conjuuction with western papers until the measure becomes a law. No American citilen should doubt the efficiency or importance of this move, and all should unite in securing its passage.

PROPOSALS FOR ROCK EXCAVATION AND DREDGING, U. S. Engineer Office, Cleveland, O., October 30, 1888.—Sealed proposals, in duplicate, will be received at this office until 12 o'clock m., Friday, December 7, 1888, at which time they will be opened in presence of bidders, for rock excavation and dredging at Ashtabula Harbor, Ohio. All information can be obtained at this office. The United States reserves the right to reject any or all proposals. L. COOPER OVERMAN, Major of Engineers.

PROPOSALS FOR SAND, etc. U. S. Engineer Office, Buffalo, N. Y., October 1, 1888. Sealed proposals in triplicate will be received at this office until 11 a. m., eastern standard time, on December 1, 1888, for furnishing sand, pebbles, stone and cement, required in the reconstruction of the breakwater at Buffalo N. Y. All necessary information may be obtained on application to the undersigned. F. A. MAHAN, Captain of Engineers

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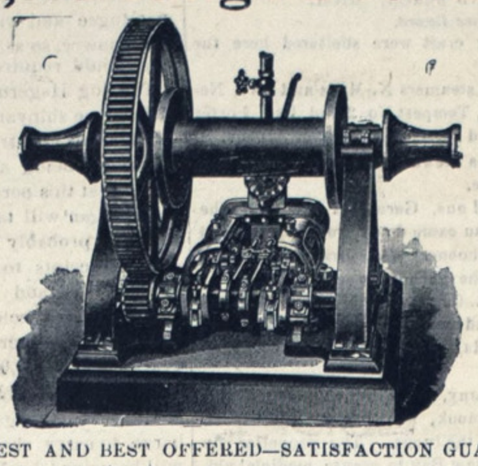
Specially adapted for Boat Hoisting Sail, Hoisting Anchor, Pulling in Tow Line etc., etc.



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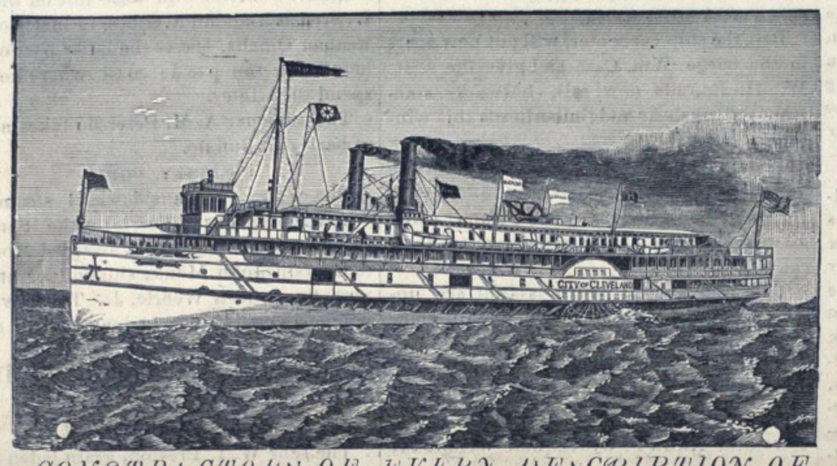

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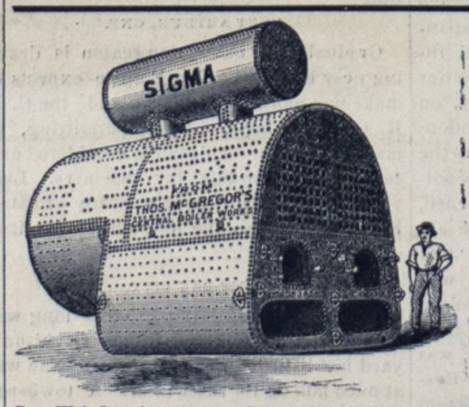

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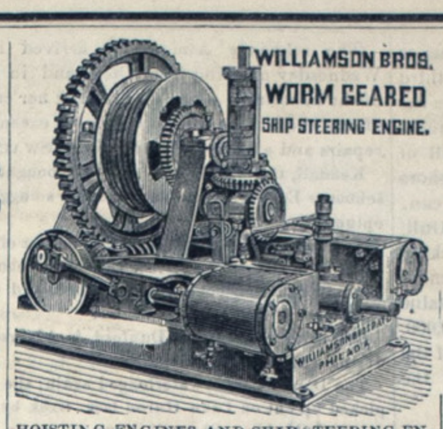

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PROPOSALS FOR DREDGING. U. S. Engineer office, Buffalo, N. Y., November 20, 1888.—Separate sealed proposals, in triplicate, will be received at this office until 11 A. M., eastern standard time, December 20, 1888, for dredging at the following harbors: 1—Wilson Harbor, N. Y.. 2—Olcott Harbor, N. Y., 3—Oak Orchard, Harbor, N. Y. Preference will be given to plant of domestic manufacture, conditions of quality and price (including import duties) being equal For specifications and all information, apply to the undersigned. F. A. MAHAN, Captain of Engineers. U. S. A.

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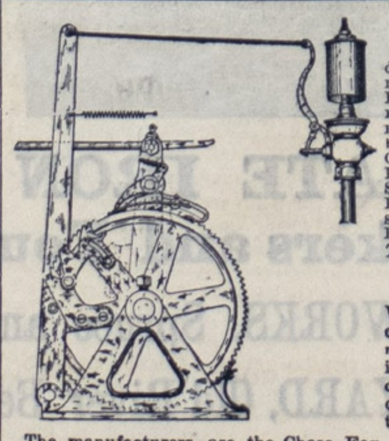

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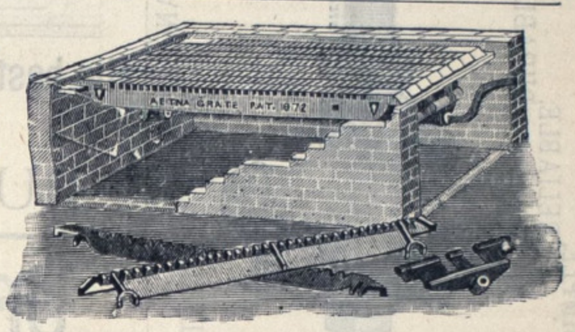

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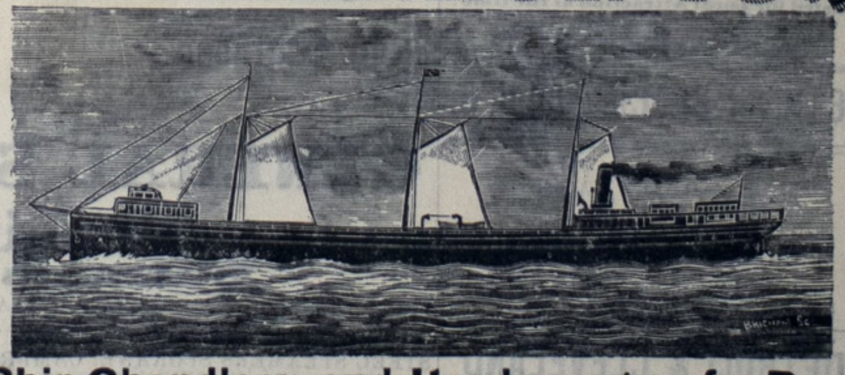

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No 4. Fast Limited Express	°2 55 A M	°2 55 A M
No. 6 N. Y. & Boston Ex	°1 35 A M	°1 40 A M
No 8, N. Y. B & A Express	°8 25 A M	°8 50A M
No 26, Elyria Accommodation	†7 45 A M	
No 10, Toledo Ac'm via Sandusky	†11 05 A M	
No 10, Toledo Accom via Norwark	†11 05 A M	
No. 24. Buffalo Accommodation		† 7 00A M
No. 10, New York & Boston, "Flyer"		°11 50A M
No 12, N Y & B Fast Express	°2 35 P M	3° 45 P M
No 2, Night Ex via Norwalk	9 40 P M	†10 00 P M
No 22, Night Ex via Sandusky	†9 40 P M	
No 26, Conneaut Accommodation	†4 25 P M	

Westward.	Arrive.	Depart.
No 1, Fast Limited Express	°12 15 A M	°12 15 A M
No. 23, Cleveland Express	°2 15 A M	
No 3, Chicago Express via "	‡5 30 A M	5 45 A M
No 25, Mich Accom Norwalk		†5 45 A M
No 21, Toledo Ex via Norwalk	†12 50 P M	†3 20 P M
No 5, St Louis Ex via Sandusky	°10 50 A M	°10 55 A M
No 9, Chi Pac Ex via Norwalk	°6 55 P M	°7 15 P M
No 31, Elyria ac to Elyria only		†4 30 P M
No 27, Conneaut Accommodation	†8 10 A M	

Sunday train for Nottingham—Depart 9:20 a. m. and 1:00 p. m.; returning, arrive at 9:20 a. m. and 4:45 p. m.

Reference marks—° Daily, † daily, except Sunday, ‡ daily, except Monday.

A local Cleveland and New York sleeper, also sleeper for Boston, and dining car daily on No. 10, leaving Cleveland at 11 50 A M.; arrive Grand Central depot, New York, 7.30 a. m.

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FOR STATIONARY, MARINE, PORTABLE AND LOCOMOTIVE BOILERS.

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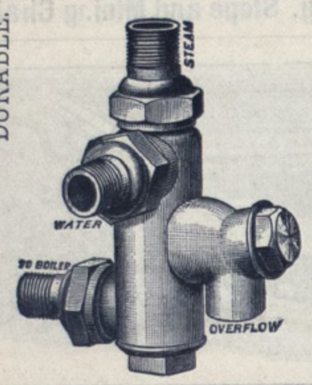

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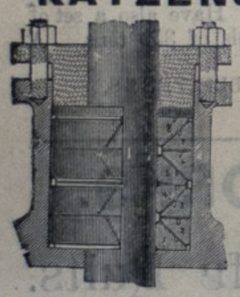

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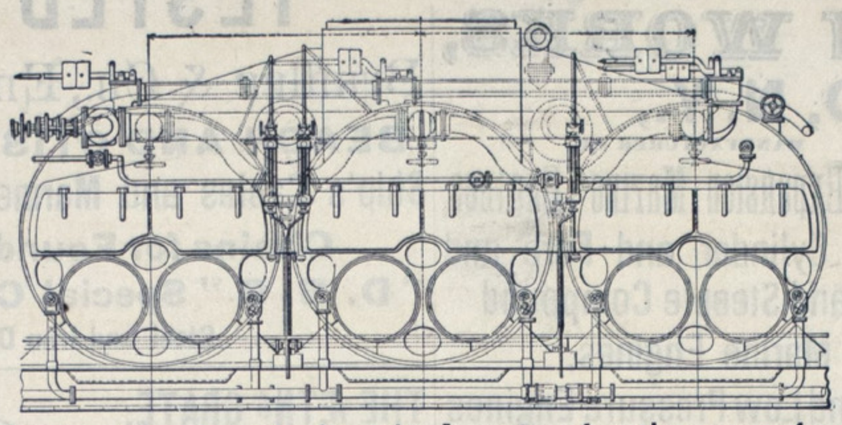

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